

Remarks

The Office Action dated April 9, 2007 and made final has been carefully reviewed and the foregoing amendments are submitted in consequence thereof.

Applicant believes that no extension of term is required and that no additional fee for claims is required. If any additional fee is required for an extension of term or claims, the Commissioner is hereby authorized to charge Deposit Account No. 01-2384.

Claims 30-35, 38-50 and 52 are now pending in the present application, of which claims 31, 32, 35, 39-42, 43-46, 48 and 52 have been amended. Claims 36, 37 and 51 are cancelled. It is respectfully submitted that the pending claims define allowable subject matter.

A. Drawing Objections.

The objection to the drawings is respectfully traversed. Claims 36, 37 and 51 are cancelled, rendering the objection to the drawing moot. Applicants accordingly request withdrawal of the objection to the drawings.

The cancellation of claims 36, 37 and 51 is made without prejudice or disclaimer, and is made solely for expediency in moving the present application closer to allowance. Applicants do not acquiesce in the substance of the drawing objections made in the Final Office Action, and Applicants reserve the right to pursue the subject matter of claims 36, 37 and 51 in another continuation application.

B. The Double Patenting Rejections

Submitted herewith is a terminal disclaimer to obviate the double patenting rejections over the claims of U.S. Patent No. 6,651,791.

The terminal disclaimer is sufficient to overcome the rejection of claim 52 on the ground of nonstatutory obviousness type double patenting as being unpatentable over claims 1 and 16 of U.S. Patent No. 6,651,791; the rejection of claims 30-41, 43-45 and 47 on the ground of nonstatutory obviousness-type double patenting over claims 1-16 of U.S. Patent No. 6,651,791 in view of either Bieber (U.S. Patent No. 5,645,146) or King et

al. (U.S. Patent No. 4,759,431; and the rejection of claims 39-41 on the ground of nonstatutory obviousness-type double patenting over the claims of U.S. Patent No. 6,651,791 in view of Liang (U.S. Patent No. 5,464,080).

Applicants accordingly request withdrawal of the double patenting rejections.

C. The § 112 Rejections

Applicants will now address the § 112 Rejections, which are believed to be overcome as explained below.

1. The § 112, ¶ 1 Rejections

The rejection of claims 36, 37, 39-46 and 51 under 35 U.S.C. § 112, first paragraph is respectfully traversed.

Claims 36, 37 and 51 are cancelled without prejudice and disclaimer and without acquiescing in the § 112 rejection being made.

Claims 39-41 and 43-46 have been amended to remove the “at least one” language in the claims as matter of expediency, without acquiescing that the claims presented any issue under Section 112 prior to being amended herein. It is also noted, that “a stem” as now recited would encompass a single stem and multiple stems when properly interpreted, and the deletion of “at least one” in the claims therefore does not change the scope of the claims.

Claim 42 recites a single stem in full accord with the figures, and is not amended herein. The reference to claim 42 in the Final Office Action is believed to be in error as it refers to language that is not in present claim 42.

Applicants accordingly request that the § 112, ¶ 1 rejections be withdrawn.

2. The § 112, ¶ 2 Rejections

The rejection of claims 30-51 under 35 U.S.C. § 112, second paragraph is respectfully traversed.

Claims 36, 37 and 51 are cancelled without prejudice and disclaimer, thereby rendering the rejection moot with respect to those claims. Claim 39 has also been amended in a manner that renders the rejection moot.

As for the remaining claims, and as Applicants previously noted, whether claim language is sufficiently definite depends on whether one skilled in the art would understand the scope of that language when read in light of the patent specification. It is asserted in the Office Action that claims 30 and 48 do not recite structure necessary to enable the function of the handle. This does not render the claims indefinite, however. Section 112 does not require that Applicants enable the invention in the claims with specific detail, and when the claims are well supported in the description, Applicants are entitled to claim the invention as broadly as the prior art allows. As explained below, the cited art does not render the presently pending claims unpatentable.

With regard to whether the scope of the claims at issues are understandable, it is not believed that recitations of structure are necessary to understand the scope of the present claims, and specifically to understand the functional recitations. It is rather well established law that a patent applicant is free to recite features of an apparatus either structurally or functionally. It is also well settled law that in construing a patent claim for examination, *all* recitations of the claims must be considered, including functional recitations. See MPEP § 2143.03 (all words in a claim must be considered in judging the patentability of the claim).

The scope of independent claims 30 and 48 as they stand, considering the structural and functional aspects thereof to give effect to all the words in the claims, and also considering the specification that fully supports the claims, are submitted to be clear and readily ascertainable to those in the art. This is all that § 112 ¶ 2 requires. The dependent claims to claims 30 and 48 are submitted to be in compliance with § 112 ¶ 2 for the same reasons.

Applicants accordingly request reconsideration and withdrawal of the § 112 ¶ 2 rejections.

D. The Prior Art Rejections

Applicants will now consider the prior art rejections in the order set forth in the Office Action.

1. Sadow in view of Liang

The rejection of claims 30, 31, 34, 35 and 37-47 under 35 U.S.C. § 103(a) as being unpatentable over Sadow in view of Liang is respectfully traversed.

Sadow discloses a wheeled carry-on travel case having a guide tube (18) and a retractable handle (20) received within the guide tube (18). As described by Sadow, the handle (20) can be rotated within the guide tube (18) between two positions rotated 90° from one another. See Col. 2, line 64 to col. 3, line 2. That is the Sadow handle (20), including the cross bar at the top the handle where a user would grip the handle, rotates relative to the guide tube (18). Sadow does not disclose that the cross bar handle grip rotates relative to any portion of the handle (20).

Liang is cited in the Final Office Action as disclosing an arm portion with an adjustable length and a handgrip that can pivot about the distal end of the arm, and the Final Office Action asserts that it would be an obvious alternative to use the Liang handle in the bag of Sadow. It is respectfully submitted, however, that Sadow already discloses a retractable handle that is adjustable in length between extended and retracted positions, and furthermore that Sadow already discloses a handgrip that can be rotated between two positions spaced 90° from one another. That is, the Sadow bag addresses both issues noted in the Final Office Action set forth as the motivation to combine the Liang handle with the Sadow bag. Because both of the noted issues are addressed by the Sadow bag, one of ordinary skill in the art would not have been motivated to look to Liang to resolve such issues.

Applicants therefore respectfully submit that a person of ordinary skill in the art, having common sense, at the time of the invention would not have reasonably looked to Liang for its teaching of an arm having an adjustable length, because Sadow already taught this. Applicants also respectfully submit that a person of ordinary skill in the art, having common sense, at the time of the invention would not have reasonably looked to Liang for its teaching of a hand grip

that can pivot about the distal end of the arm, because Sadow already taught a handgrip that could be pivoted between different positions. A person of ordinary skill would have recognized that Sadow case, on its own, provides adequate adjustability of the arm and adequate ability to position the hand grip in different positions. Common sense would lead the person of ordinary skill to simply follow Sadow's teaching, as opposed to making modifications that appear to be unnecessary to address issues of arm adjustability and handle grip positionability. There is no apparent inadequacy of the Sadow case construction that would have motivated one of ordinary skill in the art to change it in the manner suggested in the Final Office Action to provide a different handle structure that provides the same functionality to the end user.

It appears to Applicants that the present rejection reflects an impermissible attempt to use the instant claims as a guide or roadmap in formulating the rejection using impermissible hindsight reconstruction of the invention. The United States Supreme Court has recently expressed concern regarding distortion caused by hindsight bias in an obvious analysis, and notes that factfinders should be cautious of arguments reliant upon *ex post* reasoning. See KSR International Co. v. Teleflex, Inc., slip Opinion at page 17.

Applicants also respectfully submit that the references teach away from one another. The United States Supreme Court has recently noted that when the prior art teaches away from combining certain elements, a combination of those elements is more likely to be nonobvious. See KSR International Co. v. Teleflex, Inc., slip Opinion at page 14. The reliance upon Liang appears to be particularly suspect from this perspective for certain of the presently rejected claims. A number of differences and inconsistencies in the teaching of the Sadow and Liang references are noted that weigh against a prima facie case of obviousness of the present claims.

The Liang article of luggage includes, as shown in the figures, front casters (24) that are described as freely and omnidirectionally pivotal, and orientationally fixed rear wheels (24) that follow the direction of travel of the suitcase as it is pulled by a user. Liang discloses a steering apparatus for the suitcase including a ball (32) and socket (30) joint, a pivotal hinge (38), telescoping rods (54) and (56), and a handle (42) that in combination allow easy and convenient steering of the suitcase in any direction. Also, Liang notes that the position of the socket (30) is below the center of gravity of the case (10) for enhanced stability of the case while being steered

and reducing a likelihood that the case will tip or fall over. The Liang handle is therefore submitted to address particular issues and concerns that the Sadow handle does not.

The Sadow disclosure addresses the problem of towing a bag along a passenger isle of an aircraft, and accordingly includes a first set of wheels (14) on the major dimension of the base, and a second set of wheels (16) on the minor dimensions of the base. In use, the user extends the handle (20) and angles or tips the case for its weight to be positioned over one of the sets of wheels (14) and (16). See Sadow col. 2, lines 52-63 and Figure 3. Thus, the Sadow case requires tipping of the bag that Liang is aimed to prevent. Additionally, the free rotation of the Liang handle would not be desirable in the Sadow case because if the handle was allowed to be positioned obliquely with respect to the wheels (14) or (16) of the Sadow case, the case would tip and disengage the wheels from the ground, making the case very difficult to tow along a narrow passenger isle of an aircraft. The Sadow handle is purposefully designed with 90° pulling positions for towing the handle on one set of wheels or the other, and the Liang handle that is freely rotatable would be unworkable in the Sadow case. It is therefore submitted that the Liang handle that is freely rotatable would not be an obvious alternative for use in the Sadow case, because the Liang handle would seriously compromise the intended use of the Sadow bag.

Independent claim 30, that recites that “the hand grip can pivot *relative to* said distal end of said arm portion,” in combination with the other recitations claimed, is respectfully submitted to be non-obvious over the combination of the Sadow and Liang references. It is believed that the Liang handle would be undesirable for the Sadow case and would defeat what Sadow discloses as the primary advantages of the Sadow case.

Applicants further note that neither of the Sadow or Liang references discloses certain features of the dependent claims, and the dependent claims are therefore not obvious over the combination of the Sadow and Liang references. For example, the arm portions being arcuate along their axial length as recited in claim 31 is neither shown nor described in either of the cited references. Applicants note that the axial length is defined in claim 30 as extending between the opposite proximal and distal ends of the arm portion, and each of the Sadow and Liang references teach arm portions that are straight and linear along their axial lengths.

Applicants further note that the cancellation of claim 37 partly renders the rejection moot.

Applicants accordingly request that the § 103(a) rejection of claims 30, 31, 34, 35 and 37-47 be withdrawn.

2. Sadow in view of Browning

The rejection of claims 32, 33, 48, 49 and 50 under 35 U.S.C. § 103(a) as being unpatentable over Sadow in view of Browning (U.S. Patent No. 3,606,372) is respectfully traversed.

Applicants respectfully submit that Sadow and Browning are incompatible concerning certain aspects of the claimed invention, such that the references teach away from one another and weight against a prima facie case of obviousness.

Browning is cited for teaching an arm having a non-circular cross section. Applicants note that only claims 32 and 48 recite a non-circular cross section that has a clear relation to the citation of Browning set forth in the Office Action. Claims 33 and 49 recite that the arm portions are arcuate along their axial lengths, and claim 50 recites that the arm portion is a single-pole. Applicants wish to point out that the non-circular cross sections of claims 32 and 48 and the arms being arcuate along their axial lengths of claims 33 and 49 are not directed to the same attributes of the arm portions, although the Office Action appears to treat them the same. The axial length of the arm portions is defined in the claims as extending between opposite proximal and distal ends, and claims 33 and 49 have been amended to make clear that the cross-section recited is taken at a location perpendicular to the lateral axis. The amendments to claims 33 and 49 now make explicit what was believed to be implicit in the claims, and are fully consistent with the specification and figures and the ordinary understanding of the term "cross section" as used in the specification and claims. Thus, the amendments to claims 33 and 49 do not introduce new matter, nor are they believed to raise a new issue for further consideration and search.

With respect to the non-circular cross section recited, Applicants submit that the cited references do not render claims 32 and 48 obvious. The Sadow telescoping handle (20) is rotatable within the guide tube (18) to position the handle between the two towing positions. If

the Sadow handle (20) had a non-circular cross section, it could not rotate within the guide tube (18) in the manner described. Insofar as the present invention is concerned, the embodiments of arms having a non-circular cross section is provided so that the tubular sections of the arm cannot slidably twist relative to each other. Thus, the non-circular cross section is generally incompatible with the Sadow disclosure and would render the Sadow handle inoperable. Sadow in view of Browning is therefore not suggestive of the non-circular cross section as presently recited in claims 32 and 48.

Claims 33, 49 and 50 relate to features others than the non-circular cross section for which Browning was cited. Applicants request clarification of the rejections of claims 33, 49 and 50.

In any event, neither Sadow nor Browning teaches an arm portion that is arcuate along an axial length between opposite proximal and distal ends as claims 33 and 49 recite. Rather, both Sadow and Browning teach arms having axial lengths that are straight and linear between their opposite proximal and distal ends. Sadow in view of Browning is therefore not suggestive of an arm portion that is arcuate along its axial length as presently recited in claims 33 and 49.

Also, it is noted that claims 33, 49 and 50 are dependent claims, and Sadow in view of Browning fail to teach or suggest all the recitations of the independent claims from which they depend. Claims 33, 49 and 50 are therefore submitted to be patentable over the cited art for at least this reason.

Applicants accordingly request that the rejection of claims 32, 33, 48, 49 and 50 be reconsidered and withdrawn.

3. Williams et al.

The rejection of claims 30, 31, 34, 35, 37, 42-47 and 52 under 35 U.S.C. § 102(b) as being anticipated by Williams et al. (U.S. Patent No. 4,538,709) is respectfully traversed.

As explained by the Federal Circuit, the requirements of Section 102, which is generally referred to as "anticipation", requires a disclosure in a single piece of prior art of each and every limitation of a claimed invention. Apple Computer, Inc. v. Articulate Systems, Inc., 57 USPQ2d

1057, 1061 (Fed. Cir. 2000). A finding of anticipation requires that the publication describe all of the elements of the claims arranged as in the patented device. C.R. Bard, Inc. v. M3 Systems, Inc., 48 USPQ2d 1225, 1320 (Fed. Cir. 1998).

Williams et al. disclose baggage that may serve as a cart for other pieces of baggage. On page 7 of the Final Office Action it is asserted that Williams et al. show that the handle can pivot in Figures 5 and 8. On pages 5 and 7 of the Final Office Action it is also asserted that portion (50a) of Williams et al. is the stem portion of the handle that is connectable to arm portion (50b). Williams et al., however, clearly disclose that the telescoping pole (50) includes three portions (50a), (50b) and (50c). See Williams et al. col. 5, lines 27-31 and lines 61-62. Williams et al.'s teaching of the portion (50a) as part of the pole, rather than as part of the handle, is believed to be significant, and calls into immediate question the interpretation of the portion (50a) as a handle stem in the Final Office Action.

Applicants submit that Williams et al. are completely silent regarding *how* the handle (20) is attached to the pole, and does not specifically describe *how* the handle is moved between the positions shown in Figures 5 and 8 for use. Applicants also note that Williams et al. disclose an inner tube (51) within the pole portion (50a), but Williams et al. are likewise conspicuously silent regarding *how* the handle (20) attaches to the inner tube (51) and what role, if any, it might play in accomplishing the movement of the handle between the positions shown in Figures 5 and 8. In any event, Williams et al. simply do not disclose that the handle (20) can pivot *relative* to a distal end of the telescoping pole (50).

Judging by the Figures of Williams et al., the pole (50) appears to be circular in cross section, allowing the pole (50) to rotate within the protective cover (7) so that the handle (20) can be oriented in different positions relative to the baggage. In other words, it is likely that movement of the Williams et al. handle (20) by the applied force of the user causes the entire pole (50), or portions thereof, to twist or pivot together with the handle. The Williams et al. handle is believed to be similar to the Sadow handle, and is believed to be distinguishable from the presently claimed invention recited in independent claims 30 and 52 for similar reasons.

Applicants also point out that in all embodiments of the handle (20) disclosed by Williams et al., the handle includes a button snap (72) that engages a notched receptacle (70) to rigidly hold the handle (20) in place. See Williams et al. col. 4, lines 39-48 and Figure 6. As such, when the pole (50) is fully extended, the handle (20) is not pivotable because it is locked relative to the bag via the button snap (72) and the notched receptacle (70). The pivoting of the handle relative to the distal end of a retractable or telescoping arm, when the arm is in the extended position, as recited in independent claims 30 and 52 is therefore not disclosed by Williams et al.

Moreover, the locking of the handle (20) with the button snap (72) is important in the Williams et al. bag to support the bracket assembly (22) and the attached bag to allow the bag to be pushed as shown in Figure 8. Any pivoting of the Williams et al. handle when the pole is in the extended position would apparently defeat this support structure for the bag, and the Williams et al. disclosure is therefore not suggestive of independent claims 30 and 52. Claims 30 and 52 are therefore submitted to be patentable over the cited art.

Dependent claims 31, 34, 35, 37, and 42-47 depend directly or indirectly from claim 30, and when the recitations of claims 31, 34, 35, 37, and 42-47 are considered in combination with the recitations of claim 30, claims 31, 34, 35, 37, 43, 44, 45, 47 are likewise submitted to be patentable over Williams et al.

Additionally, the assertion in the Final Office Action that Williams et al. disclose a curved arm along its axial length by virtue of the cross-section being rounded is respectfully traversed. Claims 32 and 35 have each been amended for clarity to recite that arm portions are “arcuate along a center axis corresponding to the axial length.” The center axis of the Williams et al. pole certainly does not meet this recitation.

Applicants accordingly request that the § 102 rejection of claims 30, 31, 34, 35, 37, 42-47 and 52 over Williams et al. be withdrawn.

4. Chen in view of Beiber

The rejection of claims 30-35 and 37-50 under 35 U.S.C. § 102(e) as being anticipated by Chen in view of Beiber (U.S. Patent No. 5,645,146) is respectfully traversed.

As a preliminary matter of procedure, a § 102 rejection requires disclosure of all claimed recitations in a single reference, so the present rejection is improper for its reliance on both the Chen and Beiber references. Applicants presume that a § 103 obviousness rejection was intended and will respond on that understanding.

Claim 37 is canceled without prejudice and disclaimer, render the rejection of claim 37 moot.

The Examiner is reminded that Chen was disqualified as prior art that could be used in an obviousness rejection during prosecution of the parent patent with a declaration submitted under 37 C.F.R. § 1.130(a)(2). Attached hereto is a true and accurate copy of the declaration and related materials submitted in the parent patent for the Examiner's review. It is believed that the declaration is equally applicable to the present prosecution and remains sufficient to disqualify Chen as prior art that can be cited against the present claims. The requirements of 37 C.F.R. § 1.130 are still met in the present prosecution to overcome the rejection relying upon the Chen reference.

As noted in the prosecution of the parent case, Applicants are not relying upon the provisions of 35 U.S.C. § 103(c) to disqualify the Chen reference, but rather are relying upon the provisions of 37 C.F.R. § 1.130 as explained in MPEP §§ 718 and 804.03 that sets forth a different procedure to disqualify a reference. The requirements to disqualify a reference under 35 U.S.C. § 103(c) and 37 C.F.R. § 1.130 are not the same.

Applicants accordingly request that the § 103 rejection of claims 30-35 and 37-50 over Chen in view of Beiber be reconsidered and withdrawn.

5. Chen in view of Mao

The rejection of claims 36 and 51 under 35 U.S.C. § 103(a) as being anticipated by Chen in view of Mao (U.S. Patent No. 6,279,706) is respectfully traversed.


Claims 36 and 51 are cancelled without prejudice, rendering the rejection moot.

Applicants accordingly request that the § 103 rejection of claims 36 and 51 over Chen in view of Mao be withdrawn.

E. Conclusion

In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



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